USING ORGANIZATIONAL MECHANISMS TO ENCOURAGE INNOVATION

Thomas Francis Sullivan

...EY KNOX LIBRARY
...L POSTGRADUATE SCHOOL
MONTEREY, CA 93940

NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS

USING ORGANIZATIONAL MECHANISMS
TO
ENCOURAGE INNOVATION

by

Thomas Francis Sullivan

September 1979

Thesis Advisors: J. W. Creighton
S. Laner

Approved for public release; distribution unlimited.

T191983

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER: NPS-54CF79093	2. GOVT ACCESSION NO.
3. RECIPIENT'S CATALOG NUMBER	DUDLEY KNOX LIBRARY NAVAL POSTGRADUATE SCHOOL MONTEREY, CA 93943
4. TITLE (and Subtitle): Using Organizational Mechanisms to Encourage Innovation	5. TYPE OF REPORT & PERIOD COVERED: Master's Thesis September 1979
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s): Thomas Francis Sullivan	8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Naval Postgraduate School Monterey, California 93940	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS: Naval Postgraduate School Monterey, California 93940	12. REPORT DATE: September 1979
	13. NUMBER OF PAGES: 35
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office): Naval Postgraduate School Monterey, California 93940	15. SECURITY CLASS. (of this report): Unclassified
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Barrier	Innovation	Organization	Transfer
Change	Innovator	Reward	
Executive	Management	System	
Incentives	Mechanism	Technology	

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

The concept that innovation can help improve organizational effectiveness is advanced. An examination of the organizational environment suggests innovation is under-utilized within the corporate structure. The rationale for its not being used more extensively is modeled and discussed. It is proposed that an organizational mechanism can be designed, built, and used to

20. (Continued)

initiate the changes needed to exploit innovation. Finally, how the mechanism effects the chief executive and the organization is analyzed and evaluated.

Approved for public release; destribution unlimited.

Using Organizational Mechanisms to Encourage Innovation

by

Thomas Francis Sullivan
B.S., San Diego State University, 1969

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
September 1979

ABSTRACT

The concept that innovation can help improve organizational effectiveness is advanced. An examination of the organizational environment suggests innovation is under-utilized within the corporate structure. The rationale for its not being used more extensively is modeled and discussed. It is proposed that an organizational mechanism can be designed, built, and used to initiate the changes needed to exploit innovation. Finally, how the mechanism effects the chief executive and the organization is analyzed and evaluated.

TABLE OF CONTENTS

I. INTRODUCTION ---------- 8

II. INNOVATION IN THE ORGANIZATIONAL CONTEXT ----------11

A. ORGANIZATIONAL INCENTIVES ----------11

B. MANAGEMENT INCENTIVES ----------11

C. CHIEF EXECUTIVE ACTION MODEL ----------12

D. ANALYSIS OF INTRUDERS ----------15

III. ORGANIZATIONAL MECHANISMS ----------17

A. WHY MECHANISMS? ----------17

B. GROUP DEVELOPMENT MODEL ----------18

C. PROGRESS MEASUREMENTS ----------21

D. INNOVATION GROUP MEMBERSHIP ----------22

E. PROTECTING THE GROUP DURING DEVELOPMENT ---------23

F. INNOVATION GROUP OBJECTIVES ----------25

G. EXECUTIVE AND ORGANIZATIONAL CHANGES ----------27

IV. SUMMARY ----------31

BIBLIOGRAPHY ----------34

INITIAL DISTRIBUTION LIST ----------35

LIST OF FIGURES

1. THE CHIEF EXECUTIVE ACTION MODEL ---------- 14

2. THE GROUP DEVELOPMENT MODEL ---------- 20

3. THE MODIFIED CHIEF EXECUTIVE ACTION MODEL ---------- 29

ACKNOWLEDGEMENT

I would like to acknowledge the help and assistance provided by Dr. Steve Laner. His suggestions, insights and critiques were invaluable.

I. INTRODUCTION

Today's manager operates in an environment fraught with problems of decreasing resources, declining numbers of personnel and reduced budgets. He or she is expected to overcome these obstacles through resourceful improvements in efficiency or effectiveness. One alternative which can achieve these goals is innovation.

What is innovation? Innovation is not a technological advancement. Innovation is the process of applying a given technology to areas other than those for which it was originally designed. It requires imagination, the ability to organize, and the skills necessary to overcome skeptics and detractors. Stockfish [Ref. 13] describes the following five general characteristics of the innovation process:

1. An innovation is often made possible by some technological improvement; not necessarily directed towards its eventual application.
2. An innovation often requires organizational changes.
3. Innovations can often entail a change in the status quo among specialized subgroups within the larger organization.
4. Innovations are most likely to occur after an organization has experienced some external force or shock.
5. Although most innovations have a technological foundation, some occur as a result of changes in the social environment.

It is obvious from the above description that timing, personalities, and organizational environment play extremely important roles in the innovative process. Upper management's

influence in these areas is critical to the establishment of an atmostphere which encourages the use of innovation. Without management support this resource becomes neglected and opportunities for organizational and functional improvements are lost.

Unfortunately innovation falls in the category of many similar activities. The concepts and philosophy behind utilizing innovation are beyond reproach. Discussions on the topic will normally result in positive responses from chief executives. They fully agree with the rational for its use and verbally support its implementation. Active pursuit of the objective, however, rarely occurs. Innovation becomes relegated to the list of needs titled "Nice to Have" and is thereby excluded from the mandatory requirements group. Innovation must compete with more pressing activities and, therefore, becomes one more burden for management. Since the urgency for innovation is not defined and management incentives do not exist, it can be perpetually delayed.

The process is not peculiar to innovation. It affects many other activities which are also vying for executive attention. Its frequency is a function of the number of individuals marketing their specific interests at a given point in time.

Understanding this process can be helpful. If a special activity, i.e. innovation, can provide benefits to the organization, then it behooves the chief executive not only to be aware of the process, but to interrupt the natural cycle.

The executive's efforts should be directed toward converting innovation into a viable corporate objective and thereby causing it to effectively compete with existing urgent needs.

The purpose of this study is to examine this process and determine how innovation can be exploited by setting up appropriate organizational mechanisms. The assumption is made that once an activity is institutionalized it no longer has to compete for attention. It becomes increasingly self-perpetuating, especially if the promised benefits materialize.

II. INNOVATION IN THE ORGANIZATIONAL CONTEXT

A. ORGANIZATIONAL INCENTIVES

Inherent in any organization are incentives which affect an individual's attitude toward innovation. These incentives can be categorized as either negative or positive. Positive incentives are those which encourage the use of innovation. They might include increased visibility, improved professional standing, promotions and advancement. Successful innovators normally expect to receive one or more of these rewards for their efforts.

In direct contrast are the negative incentives. They can include non-recognition, fear of failure, loss of promotion, or even separation if the innovation is unsuccessful. Negative incentives usually outweigh positive ones. In addition, the most drastic negative incentive, separation, is far more dramatic than any of the positive incentives. Therefore, most organizations experience a much stronger influence by the negative factors with consequent minimal innovative activity.

B. MANAGEMENT INCENTIVES

In order to counteract the negative factors, management must become actively involved. Through careful evaluation and persistent suppression of the negative incentives an environment conducive to innovative activities can be developed. This approach seems rather simple and straightforward. It is, therefore, important to examine the realities of the situation.

Like the innovators themselves, management is faced with the dilemma of not having strong motivational factors which would cause them to pursue innovation. Their view is one of seeing innovation as an additional burden. While it is agreed that innovation is needed, the actions necessary to achieve the end product require the diversion of time and resources from current needs. Resources and time are always limited. The executive is normally constrained to addressing immediate and urgent concerns; consequently innovation will be put off to a "more opportune time." In reality "a more opportune time" never occurs. Innovation becomes a luxury that can be had only if the resources and time ever become available.

This syndrome occurs at all levels of management. It is perhaps most serious when exhibited by the chief executive. His or her time is most valuable and usually in the shortest supply. There is a continuum of individuals and groups trying to obtain chief executive support for their particular interests. If their requests are logical and have merit they are usually accorded an opportunity to plead their case. Seldom do their requests generate any action responses. At best, they receive verbal support and assurance that future decisions will include careful consideration of their recommendations.

C. CHIEF EXECUTIVE ACTION MODEL

Ideally, the chief executive utilizes all available resources, including innovation, to attain corporate objectives. He insures that the organizational environment is receptive to innovation and aggressively pursues innovations which might result in major improvements.

Unfortunately the ideal rarely occurs. The process breaks down and innovation becomes a lost resource. A schematic representation of innovation being rejected from the chief executive's work sphere is shown in Fig. 1. The inner circle represents the chief executive. The area surrounding the inner circle, the pentration barrier, is a shell which buffers out elements which are not considered urgent or mandatory. The incoming arrows are requests for chief executive action and/or attention. They originate from various corporate activities, needs, and special interests. If they are successful in crossing the penetration barrier they elicit executive response which result in positive actions. If they fail to pierce the barricade, a non-action response occurs. The response may be positive and supportive in nature but is totally verbal in content No organizational changes are generated nor is the topic seriously discussed until the next penetration effort occurs.

The pentration barrier performs a function comparable to that of a diode in an electronic circuit. It effectively blocks all incoming current from the anode unless the electrical potential is sufficient to break through the barrier. In the model, a breakthrough will happen only when the intruder has enough energy in the form of political clout or disruptive influence to adversely impact the organization if action is not forthcoming.

The amount of energy needed to cross the barrier is directly proportional to the size of the organization. Large companies tend to generate a large field of forces due to their complexity, number of employees, impact on the community and

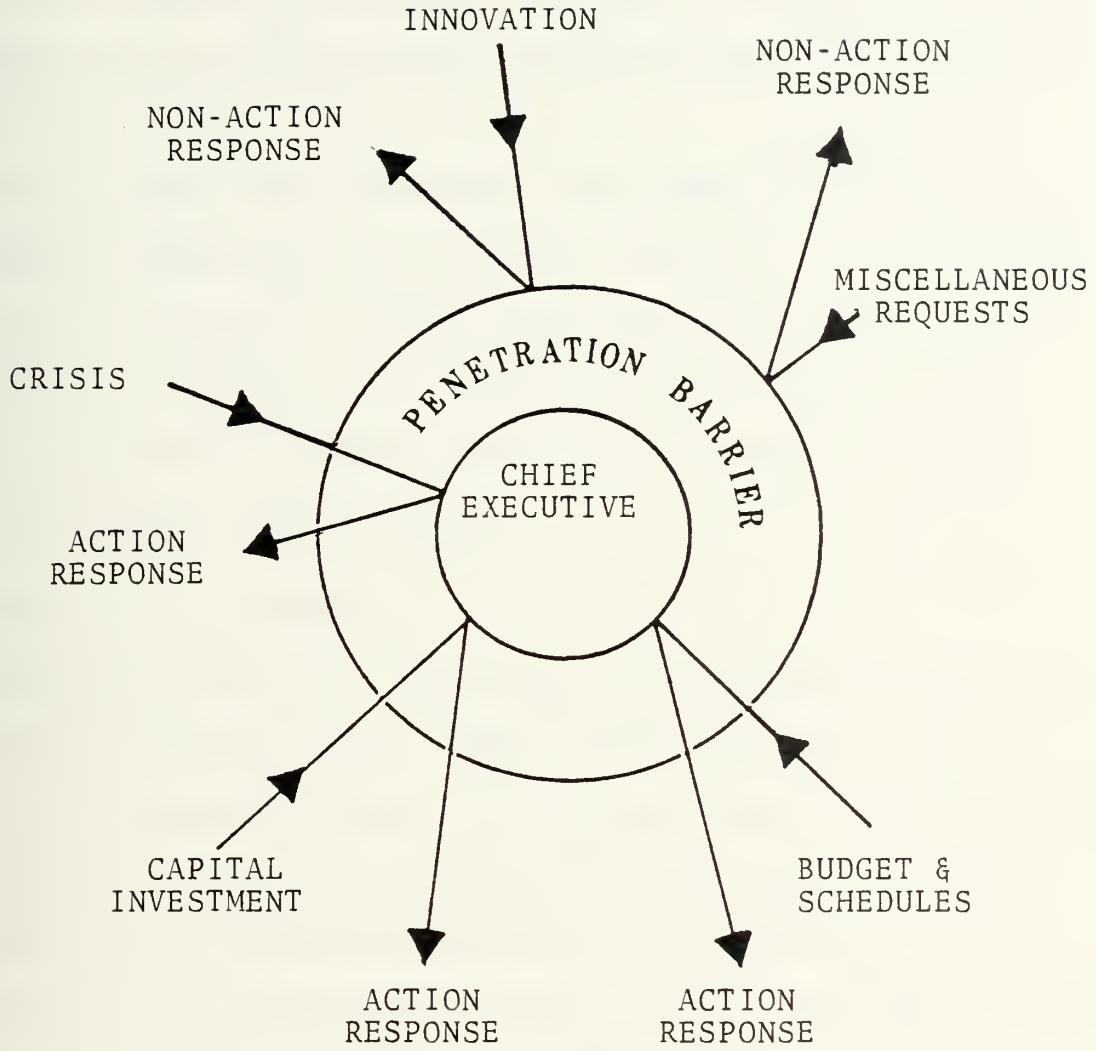

Figure 1: Chief Executive Action Model

the local economy. Many of these forces have inherent priority of entry and must be admitted. These actions reduce the amount of time available for intruder activities. Lower level intruders have a more difficult time making contact, let alone penetrating the barrier.

For the same reasons the shell thickness is indirectly proportional to the quantity of current intruders. As the number goes up, the screening process completely eliminates elements with lesser priorities. The less important intruders must evolve to a state of higher energy before they can hope to establish initial communication.

D. ANALYSIS OF INTRUDERS

Successful intruders, those able to penetrate the barrier, have several common traits. They normally have a direct impact on the corporate product or directly effect the executive's performance. Generally, ignoring the highpriority intruder will result in an unwanted event which will adversely affect production or the executive's career. It is, therefore, easier to respond at the time of intrusion than to suffer the consequences of non-action. The successful intruder usually has direct access to the chief executive and is able to attract executive attention when needed.

Unsuccessful intruders also have common characteristics. They lack major representation within the organization and do not have the ability to disrupt the production process. It is, therefore, easier to disregard their requests and satisfy their interests with verbal acknowledgements. They can be

effectively buffered by sending them to lower level managers when it is inconvenient for the chief executive to meet with them. Their requests are usually logical, worthy of consideration, and have the potential for corporate benefits if implemented. They are normally thought of as luxuries because the time and resources necessary for implementation are not available under existing priorities.

III. ORGANIZATIONAL MECHANISMS

A. WHY MECHANISMS?

Society looks upon the chief executive as the center of power in any organization. Theoretically the corporation is a reflection of his personality and particular management style. His desires and preferences are carefully monitored and provide the stimulus for management policies throughout the hierarchy.

Galbraith, in his discussion of "The Technostructure," [Ref. 4] presents a different picture. He theorizes that corporate and societal power is held by groups within organizations and not by individuals. Executive policy is really a reflection of decisions made by groups located throughout the organizational structure. The groups are formal and informal and their membership is based on current informational needs for a specific decision.

A similar position is held by Laner. [Ref. 6] He maintains that major changes in corporate policies are often a result of pressures applied from the bottom of the organization. These changes appear to have originated at the top. In actuality they occurred because a special interest group was able to apply sufficient pressure on the chief executive to change company goals. In terms of the Chief Executive Action Model they could be labeled as "Successful Intruders" and the change would be an "Action Response."

Two examples of this phenomenon are organized labor and civil rights groups pressing for equal educational and employment opportunities. Both began, not because of management desires, but due to the organized efforts of special interest groups. They started with minimal backing and limited support. Their initial requests were ignored and dismissed as not warranting management attention. As they grew in size, stature, and political acumen they acquired strength, visibility and recognition. When they were able to demonstrate sound leadership and strong organization, their influence and power could no longer be denied. Today that power is clearly evident in their intimate relationships with local, state and federal officials as well as private executives and corporate leaders.

The above examples describe the manner in which organizational mechanisms come into being, gain acceptance and stability. They illustrate the process of evolution over time, from insignificant beginnings to acknowledged centers of influence. Their effectiveness is attested by the numerous changes in policy throughout private industry and government. Many incentives have now been incorporated to ensure that their interests are maintained and protected. Few individuals have the power to adversely modify the built-in procedures, guidance and incentives instilled throughout the system.

B. GROUP DEVELOPMENT MODEL

The evolution of these mechanisms is depicted in the Group Development Model (Fig. 2). The center structure is the Chief Executive Action Model. The inward pointing arrows are

intrusion attempts by the special interest group and the outward ones are responses by the chief executive.

The three peripheral balls represent a single group which is going through a process of growth and development. The evolution is a continuum, but for purposes of discussion it is shown in three distinct phases. The Informal Phase (bottom ball) is the birth of the group. Characteristically it is small in the number of individuals involved and has minimal professional stature. It is probably rather disorganized without a single strong leader and tries to capitalize on unplanned opportunities to interface with the chief executive.

In phase two, the Minor Formal Phase, the group begins to present itself as a defined body with established objectives. It now has a title reflective of its constituency. While it is better organized, it has difficulty maintaining cohesion. Major activity occurs only when a crisis is pending. The remainder of the time the membership performs assigned corporate functions and group needs are seldom addressed. Within the corporate organization it has achieved a modicum of recognition and can obtain access to the chief executive upon request. Meetings have to be scheduled well in advance and repeated cancellations are accepted.

The top and largest ball is the final step, the Major Formal Phase. The group has now reached maturity. It has achieved recognition and is armed with political leverage and skill. The leadership has established a reputation for its ability to pursue and achieve group goals. Continuously active group

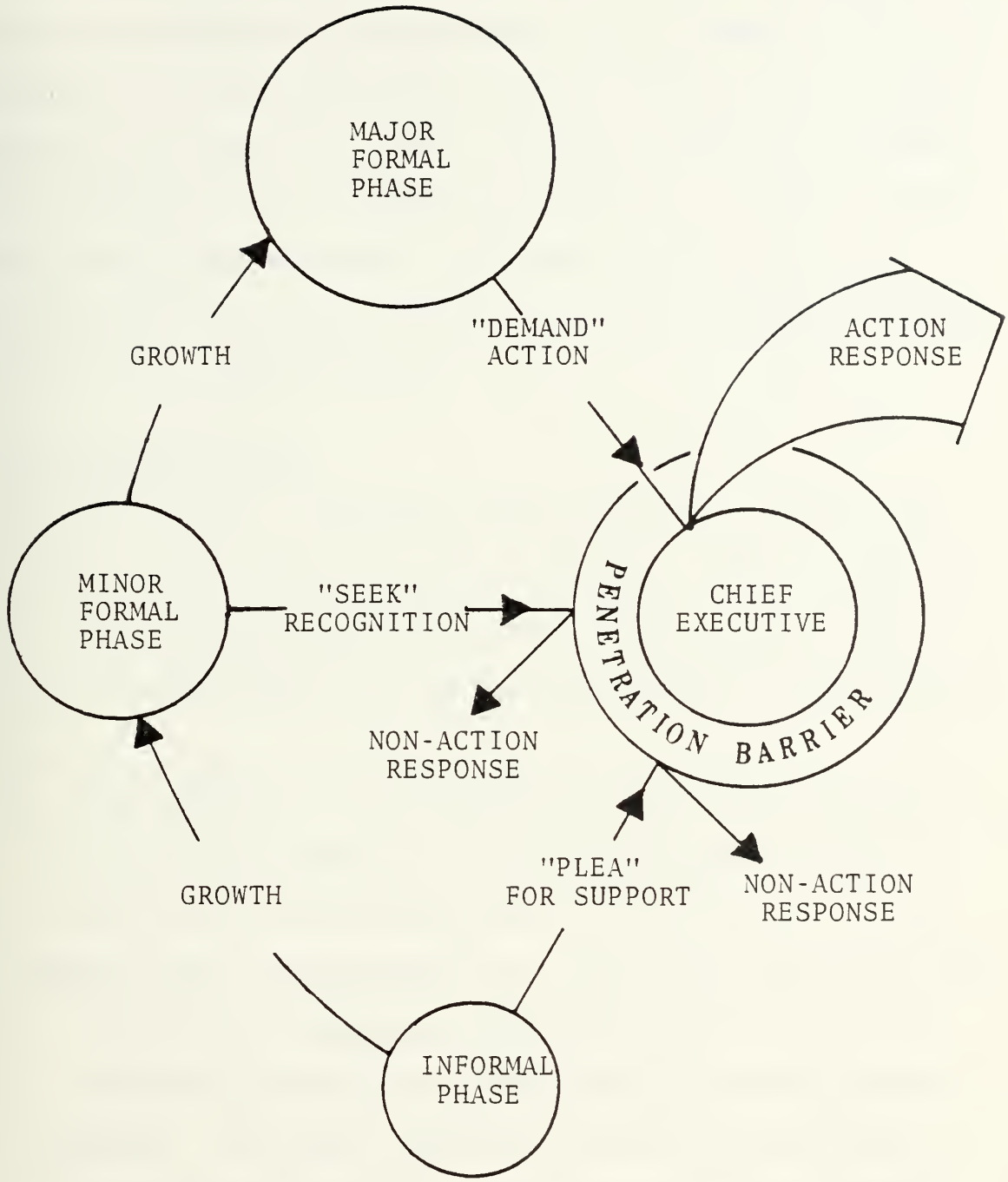

Figure 2: Group Development Model

management and regularly scheduled meetings ensure that objectives are addressed systematically and routinely. The group has become an organization with strong internal links and its survival is no longer at issue. As long as there is a common concern the group will continue to function. It now has easy access to the chief executive. Meetings are scheduled at short notice and executed promptly. There may even be an open door policy for critical events.

C. PROGRESS MEASUREMENT

There are several indicators which identify the stage of growth that a particular group has achieved. They pertain to how and when the group approaches the chief executive, and whether or not the group successfully overcomes the penetration barrier.

The "how" component can be gaged by the nature of the request for executive support. In the beginning the group is unsure of its position and the request is usually in the form of a plea for help. During phase two the group has gained confidence and usually is seeking recognition. By phase three it has experienced numerous successes and its requests have become demands. No longer satisfied with having the opportunity to discuss its needs, it wants to see positive steps taken toward meeting its demands. If they are not forthcoming, then the group is in a position to apply pressure that causes the chief executive to feel that it would be easier to comply.

Another measure of growth is the chief executive's availability to the group. As long as the group has to take

advantage of unplanned opportunities to establish contact it is in the under-developed state (phase 1). This is followed by recognition (phase two) and the ability to request and schedule meetings at the executive's convenience. It finally converts into an open door relationship (phase three). By this time the group has demonstrated its political prowess and has established a feeling of mutual respect. This will occur only when the chief executive has come to anticipate or experience the adverse consequences of being inattentive to group demands.

The last and most obvious measure is the group's faculty to overcome the penetration barrier. Only when it has achieved prominence within the organizational community will it be able to cross the barrier and stimulate an action response. Penetration failures place the group somewhere in the earlier growth stages. This measure, therefore, is only a means of evaluating the achievement of the Major Formal Phase and does not locate the group in a specific stage of earlier development.

D. INNOVATION GROUP MEMBERSHIP

If an innovation group is to be formed several questions need attention. First: who would be interested in group involvement?

The group should be comprised of individuals who have experienced the problems associated with an environment which is non-receptive to innovation. Previous frustrations will provide the motivation necessary to vigorously pursue innovation objectives. Shared experiences will instill a common thread into their personal goals and ideas. Membership should also include

anyone with an expressed or demonstrated interest in the innovative process. Membership should not be limited to a specialized group. It should include all skills and professions thereby establishing a strong and diversified base. The total number of people involved is also an important factor. Size is directly proportional to the future bargaining position of the group. Hopefully, the group will contain people with previous leadership experience and existing organizational influence. The duration of the growth cycle will depend on the backgrounds and abilities of the founding members. Credible individuals respected throughout the corporate structure can be a tremendous asset during the early phases. People knowledgeable in the political process can take advantage of timing and critical events to shorten the path to the major formal position.

E. PROTECTING THE GROUP DURING DEVELOPMENT

During the early growth phases the innovation group is susceptible to attack from non-supportive organizational elements. Adversaries with minimal power will not be able to negate group advances. If, however, the attacker is another group or individual operating from a higher energy level, it could adversely affect the growth process. Therefore it is necessary to provide protection during the earlier stages of development. The amount of protection will depend on their adversaries' overall strengths and the group's ability to counter aggressions. The requirements for protection are more pronounced in the beginning and diminish as the group matures.

Group protection is most effective when administered by a high-ranking manager. Many early attacks will be eliminated if the entire corporate organization is aware that a senior manager will defend and actively support the innovation group. In addition the protector's management skills will allow him to accurately evaluate the opposition's strengths. This will insure that management support is only supplied when needed. The group must be allowed to struggle independently when the probability for loss is minimized. Minor skirmishes provide valuable opportunities to develop political skills.

The individual selected to sponsor the group should have several attributes. Someone with a strong interest in innovation would be a logical choice. The sponsor must be placed high in the organization and respected throughout the corporate structure. He must have communicative and political skills to evaluate and handle confrontations. Since the implied threat is usually more effective than direct action, sponsor involvement should be minimized. Activity should be limited to the amount necessary to warn detractors that support will be provided if it is needed. Any additional protection should occur only if a major confrontation is imminent. Rotating the assignment among several key individuals might provide additional benefits. Not only is the protective umbrella strengthened, but an early management awareness of the value of innovation can result. A general concern for innovation at the higher management levels will accelerate the later effects of the organizational mechanism.

F. INNOVATION GROUP OBJECTIVES

Innovation group objectives could span a wide range of needs. Hopefully they will include the elimination of innovation barriers and the establishment of organizational incentives. Group activities must eventually focus on these two areas. Major changes in the innovative environment will result when the barriers are removed and positive incentives are established.

Because innovation barriers involve people they are very sensitive to changes. One type of barrier is the individual who is happy with the status quo and does not want to see it disrupted. He views all change as bad and sees innovation as creating chaos and imposing an unwarranted increase in workload. When this person is organizationally placed directly above an innovator, creativity is stifled and often eliminated. The group is, therefore, interested in removing the barrier and providing freedom for the innovative process. It can maneuver to either neutralize the individual or have him relocated. A well-developed group may be able to achieve neutralization by demonstrating its strength. If it can cause the manager to feel that he lacks support and represents a minority position, the manager will frequently stop his barrier tactics. If the person is high in the management hierarchy, the group may lobby for his relocation or removal. Pressure is applied to the chief executive and other high-ranking managers who are supportive to the innovative cause. United management support can be used to isolate the individual from his peers. The pressure will

eventually cause the individual to revise his position or experience adverse management actions.

Another type of barrier, and also a major concern of the innovation group, is premature evaluation [Ref. 5]. It occurs when an innovation is subjected to criticism or attack before it has had a chance to yield any benefits. Appraisal normally comes from peers and organizational competitors who may not have a vested interest in the innovation. Their main thrust is to diminish the innovator's professional standing. Frequently they feel threatened by the results of the innovative process. Premature evaluation can result in the innovation not being carried to its maximum potential. It may lead to the scrapping of an innovation which could have produced major improvements. The innovation group can be effective by exposing the attacks and soliciting management support for control and elimination.

One way of minimizing this activity is to involve a maximum number of people in the innovation. Making innovation a group effort can provide multiple benefits. When all of the people who stand to gain from the innovation feel responsible for its success there will be fewer individuals remaining as potential critics. Responsibility will be more widely distributed and the probability of success increased. Individuals who would have been the most knowledgeable opponents of the project will have been eliminated and any remaining adversaries will have to operate without the benefits of first-hand information.

Positive organizational incentives play an important role in the innovative environment. They are tied directly to the reward system and are a reflection of management priorities. The innovation group, like many other groups, is interested in seeing that the reward system recognizes their cause. A primary objective is to insure that innovation becomes not only an excepted practice but an expected activity. This can only occur when the reward system encourages innovation.

Organizational incentives usually go through an evolutionary process. The first management concessions are visibility and recognition via corporate news media and noncash rewards. They enhance an individual's professional standing and bring his or her achievements to the attention of other functions within the organization. Cash rewards for cost savings and exceptional performance are the next level of inducements. When innovations can be tied to improvements the innovator receives a percentage of the savings. The final phase is the establishment of innovation as a criterion for performance appraisals and promotional selection. This is the ultimate objective for the innovation group. Innovation becomes the norm and not the exception for position descriptions and annual evaluations.

G. EXECUTIVE AND ORGANIZATIONAL CHANGES

When the innovation group reaches the Major Formal Phase several changes can be expected. The Chief Executive, all levels of management, and the entire organization will be affected. The degree of impact will vary with the priority and emphasis placed on innovation.

Changes to the Chief Executive can be analyzed by examining the Modified Chief Executive Action Model (Fig. 3). The changes to the original model (Fig. 2) are a result of the pressures applied by the organizational mechanism, the innovation group. Once the innovation group penetrates the barrier, the executive's attitude toward innovation begins to change. unlike other intruders, the group's influence will broaden his perspective and make him more receptive to other special interests. This effect is shown as a reduction in the width of the pentration barrier. Groups previously excluded from entry are now capable of crossing the barrier. The energy needed to obtain executive action has been reduced. In order to accommodate these new interests, previously successful intruders will be displaced. Redefined priorities will make room for the new activities. Activities previously handled by the chief executive will be delegated to lower level managers. Along with delegation goes the need for frequent chief executive involvement. These changes provide the executive with the time needed to actively pursue innovation.

Like the chief executive, the organization can expect some significant changes. Reward system modifications will be the most visible. Successful innovators will receive a wide range of prizes, from verbal recognition to career advancements. More importantly, the changing reward system signifies the beginning of a transition. Adjusted priorities will now reflect a new emphasis on innovation. Along with the emphasis will come future managers from the corps of

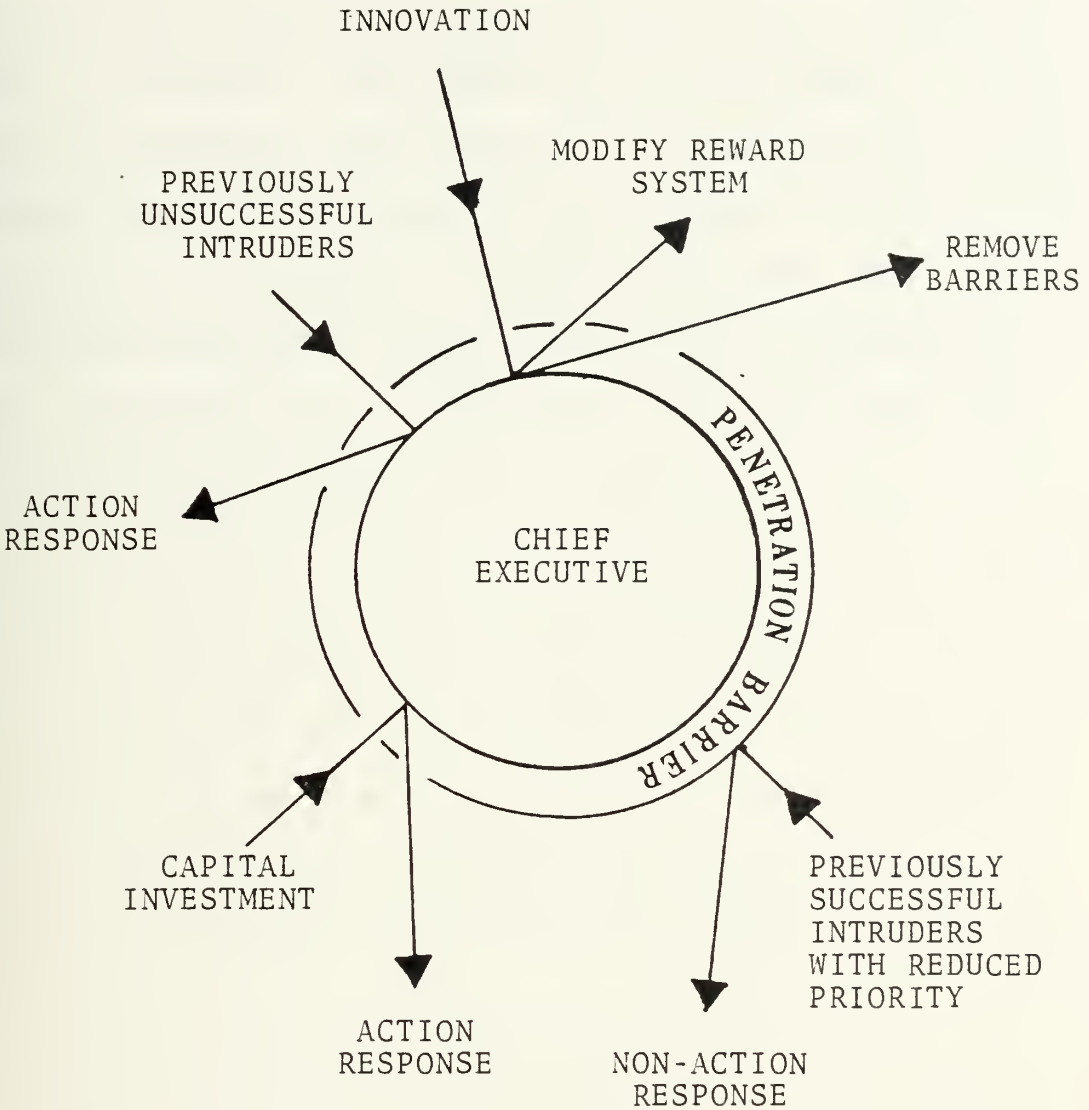

Figure 3: Modified Chief Executive Action Model

innovators. Their advancement will bring a new mentality to areas previously lacking concern for innovation. A passive attitude of accepting innovation will not be enough. Organizational requirements will mandate a continuing flow of innovative activity. The new manager will expect the same actions from peers and subordinates. Changing attitudes will eventually result in an environment which is prepared to change when warranted. Flexibility and readiness to accept new ideas will become corporate trademarks.

IV. SUMMARY

There are numerous benefits to be achieved by encouraging innovation. Improved organizational efficiency and effectiveness are two of the by-products. They can occur when technology is utilized in an area other than the one for which it was originally designed.

Unfortunately, innovation is faced with many negative factors in the standard corporate environment. Incentives that discourage innovation, barriers which impede its progress, and reward systems which do not recognize its existence, are prime examples. They discourage individuals from becoming involved in innovative activity. In the above scenario the risks and responsibilities of failure force innovation into dormancy. Consequently, many opportunities for improvement are lost or never recognized.

Changing the corporate environment requires management action which will occur only when innovation can successfully compete with other corporate needs. Management, like the rest of the organization, has few positive incentives to stimulate the needed changes. The average manager becomes enmeshed in his daily activities and unconsciously blocks out innovation.

A proposed solution to the dilemma is to build an organizational mechanism that will provide the stimulus necessary to effect organizational changes. The mechanism does not make the modifications directly, but creates the pressure needed

to get management attention and action. Resulting changes should establish and emphasize positive incentives and suppress or eliminate organizational barriers to the innovative process.

The mechanism is built around a special interest group. The group's concern for innovation provides the foundation for building a collective body. By protecting and nurturing the nucleus it can eventually grow into a vehicle which will compete for the organizational resources needed to develop an innovative environment.

The group's success will be reflected first in a modified reward system. Various compensations will be established for successful innovators. As the rewards increase the environment will begin to improve markedly. Eventually vacant management positions will be filled by innovators. Their advancement signifies a change in how the organization views innovation. Innovation will now become a requirement rather than a tolerated practice.

The prescribed mechanism is only one approach. Similar mechanisms can be designed to achieve desired objectives. Careful evaluation of a specific organization may reveal a more effective means. The objective is to build a mechanism which can survive and compete in the organizational environment. This implies that it must become institutionalized and therefore should include three important elements:

1. Pressure comes from the bottom, therefore the mechanism must include individuals from lower levels in the organization.

2. The mechanism must have sufficient energy to compete with existing and future organizational needs.

3. The mechanism must be designed for longevity. It must not be dependent on specific individuals or personalities.

BIBLIOGRAPHY

1. Ames, ArDee, "Some Thoughts on Large Organizational Leadership," The Bureaucrat, Vol. 7, No. 3, pp. 50-57, Fall 1978.

2. Creighton, J.W., Jolly, J.A. and Denning, S.A., Enhancement of Research and Development Output Utilization Efficiencies; Linker Concept Methodology in the Technology Transfer Process, Naval Postgraduate School, 30 June 1972.

3. Drucker, Peter F., Management: Tasks, Responsibilities, Practices, pp. 782-803, New York: Harper & Row, 1973.

4. Galbraith, John Kenneth, The New Industrial State, pp. 60-71, Boston: Houghton Mifflin Company, 1967.

5. Gluck, Frederick W. and Foster, Richard N., "Managing Technological Change: A Box of Cigars for Brad," Harvard Business Review, Vol. 53, No. 5, pp. 139-150, Sept.-Oct. 1975.

6. Laner, Steve, Personal Interview on Innovation and Management, 6 June 1979.

7. Mintzberg, Henry, The Nature of Managerial Work, New York: Harper & Row, 1973.

8. Nyenhuis, K.E. and Welborn, J.H., Analysis of the Perceived Reward to the Receiver and Its Impact on the Predictive Model of Tech. Trans., Thesis, Naval Postgraduate School, June 1976.

9. Oncken, William and Wass, Donald L., "Management Time: Who's got the Monkey?" Harvard Business Review, pp. 75-80, Nov.-Dec. 1974.

10. Perrow, Charles, Complex Organizations: A Critical Essay, Glenview, Illinois: Scott, Foresman and Company, 1972.

11. Sayles, Leonard R., Leadership: What Effective Managers Really Do. ... and How They Do It, New York: McGraw-Hill Book Company, 1979.

12. Schleh, Edward C., Management by Results, New York: McGraw-Hill Book Company, 1961.

13. Stockfish, J.A., Plowshares Into Swords: Managing the American Defense Establishment, pp. 73-75, New York: Mason and Lipscomb Publishers, 1973.

14. White, William, "Effective Transfer of Technology from Research to Development," Research Management, Vol. XX/ No. 3, May 1977.

INITIAL DISTRIBUTION LIST

		No. Copies
1.	Defense Documentation Center Cameron Station Alexandria, Virginia 22314	2
2.	Library, Code 0142 Naval Postgraduate School Monterey, California 93940	2
3.	Department Chairman, Code 54 Department of Administrative Sciences Naval Postgraduate School Monterey, California 93940	1
4.	Professor J. W. Creighton, Code 54CF Department of Administrative Sciences Naval Postgraduate School Monterey, California 93940	10
5.	Dr. Stephen Laner Management Sciences Staff U. S. Forest Service P. O. Box 245 Berkeley, California 94701	1
6.	T. F. Sullivan 329 Trailview Rd. Encinitas, California 92024	2
7.	Defense Logistics Studies Information Exchange U. S. Army Logistics Management Center Fort Lee, Virginia 23801	1

Thesis 187108
S8617 Sullivan
c.1 Using organizational mechanisms to encourage innovation.

2 AUG 82
SEP 25 85
5 APR 86

30423

Thesis 187108
S8617 Sullivan
c.1 Using organizational mechanisms to encourage innovation.

thesS8617
Using organizational mechanisms to encou
3 2768 002 02203 0
DUDLEY KNOX LIBRARY